AMENDMENTS TO THE CLAIMS

1. (Currently amended) A valve assembly comprising:

a support ring having an outer surface and an inner surface;

a valve body comprising an annular body portion supporting a plurality of moveable leaflets that are moveable relative to the annular body portion and to each other between a first closed position and at least one second open position defining a first fluid pathway for the flow of fluid in a first direction across the assembly when subject to a first pressure differential across the body;

wherein the annular body portion is mountable to the inner surface of the support ring and is relatively rotatable thereto;

and further wherein the annular body portion is axially moveable relative to the support ring from a sealed position to at least one unsealed position, the annular body portion and the support ring, in the unsealed position together defining a second fluid pathway for the flow of fluid in said first direction across the assembly and wherein the annular body portion moves to its at least one unsealed position when the assembly is subjected to the first pressure differential.

2. (Currently amended) A valve assembly for implantation in the cardio-vascular system of a human or animal subject, the valve assembly comprising:

a support ring having an outer surface and an inner surface, the outer surface being engageable with the wall of a vessel of the human or animal subject; and

a valve body comprising an annular body portion supporting a plurality of moveable leaflets that are moveable relative to the annular body portion and to each other between a first closed position and at least one second position defining a first fluid pathway for the flow of fluid in a first direction across the assembly when subject to a first pressure differential across the valve body;

wherein the annular body portion is mountable to the inner surface of the support ring and is relatively rotatable thereto;

and further wherein the annular body portion is axially moveable relative to the support ring from a sealed position to at least one unsealed position, the annular body portion and the support ring, in the unsealed position, together defining a second fluid pathway for the flow of

fluid in said second direction across the assembly and wherein the annular body portion moves to its at least one unsealed position when the assembly is subjected to the first pressure differential.

3. (Previously presented) The valve assembly of claim 1 wherein when the valve assembly is subjected to a second pressure differential, the plurality of leaflets move to their first closed position.

4. (Previously presented) The valve assembly of claim 1 wherein the first pressure differential comprises a region of higher pressure upstream of the valve assembly relative to a lower pressure downstream of the valve.

5. (Previously presented) The valve assembly of claim 1 wherein the second pressure differential comprises a region of lower pressure upstream of the valve assembly relative to a region of higher pressure downstream of the valve assembly.

6. (Canceled)

7. (Currently amended) The valve assembly of claim ~~6~~ 1 wherein the annular body portion is not in engagement with the support ring in its unsealed position

8. (Previously presented) The valve assembly of claim 1 wherein the leaflets extend inwardly from and at an angle to the annular body portion when in their closed position.

9. (Previously presented) The valve assembly of claim 8 wherein the leaflets together form a convex body that extends in a first direction away from the annular body portion when the leaflets are in their closed position.

10. (Previously presented) The valve assembly of claim 1 wherein at least one leaflet overlaps at least a portion of adjacent leaflet when in their first closed position.

11. (Previously presented) The valve assembly of claim 1 wherein the leaflets move progressively upon progressive change of pressure between the first pressure differential and the second pressure differential.

12. (Previously presented) The valve assembly of claim 1 wherein at least one of the leaflets has a surface coating or the surface has been treated to reduce turbulence of fluid flowing past and/or over the leaflets.

13. (Previously presented) The valve assembly of claim 1 wherein the moveable leaflets are hingedly connected to the annular body portion of the valve body.

14. (Previously presented) The valve assembly of claim 1 wherein the moveable leaflets are fixedly connected to the annular body portion of the valve body.

15. (Previously presented) The valve assembly of claim 1 wherein the leaflets are made from a biological material selected from the group comprising autologous graft tissue, allograft tissue and xenograft tissue.

16. (Previously presented) The valve assembly of claim 1 wherein the moveable leaflets are made from an artificial material selected from the group comprising polymers, composites, metals and metal alloys including Nitinol™.

17. (Previously presented) The valve assembly of claim 1 wherein the support ring is made from a ceramic, a metal or a metal alloy material including a Cobalt-Chromium alloy.

18. (Previously presented) The valve assembly of claim 1 wherein the annular body portion is made from a ceramic, a metal or a metal alloy material including a Cobalt-Chromium alloy.

19. (Previously presented) The valve assembly of claim 1 wherein the annular body portion includes a turbine member to optimize rotation of the annular body portion.

20. (Previously presented) The valve assembly of claim 1 wherein the annular body portion and the support ring are provided as a single unit for implant into a system or subject.

21. (Previously presented) The valve assembly of claim 1 wherein the annular body portion and the support ring are provided as separate components.

22. (Previously presented) The valve assembly of claim 1 installed as any valve of the cardiovascular system including the aortic valve, the pulmonary valve, the tricuspid valve and the mitral valve.

23. (Previously presented) A valve for implantation in the cardiovascular system of a human or animal subject, the assembly comprising:

a support ring having an outer surface and an inner surface, the outer surface being engageable with the wall of a vessel of the human or animal subject; and

a valve body comprising an annular body portion supporting a plurality of leaflets that are moveable relative to the annular body portion and to each other, the leaflets being moveable between a first closed position and at least one second opened position defining a first fluid flow pathway through the assembly when subject to a first pressure differential across the body;

wherein the annular body portion is mountable to the inner surface of the support ring and is axially moveable from a sealed position to at least one unsealed position defining a second fluid pathway through the assembly when the assembly is subject to the first pressure differential.

24. (Previously presented) The valve of claim 23 wherein the annular body portion is also relatively rotatable with respect to the support ring.

25. (Previously presented) A method of implanting a valve assembly within the cardiovascular system of a patient; the method comprising delivering the valve assembly of claim 1 within a vascular vessel of the patient.

26. (Previously presented) The method of claim 25 wherein the support ring is delivered separately to the valve body and as a first step.

27. (Previously presented) A method of implanting a valve assembly within the cardiovascular system of a patient; the method comprising delivering the valve assembly of claim 2 within a vascular vessel of the patient.

28. (Previously presented) A method of implanting a valve assembly within the cardiovascular system of a patient; the method comprising delivering the valve assembly of claim 23 within a vascular vessel of the patient.